

Play-free clamping coupling
Models KK14

KK 12301 BE

09 / 2011

- Max. torque: 8 Nm
- Three-piece, axially pluggable coupling which is play-free under pre-tension
- Play-free torque transfer, ideally adapted stiffness and optimal vibration damping
- Ring gear, hub with diameter d1 and hub with diameter d2
- RoHS-conformant



Clamping coupling KK14 with galvanically separated hubs

Play-free shaft coupling KK14 consists of two identical halves with aluminium hubs (clamping rings) which can be supplied with different bores (fit size H7) for mounting the shafts. The coupling can be pulled apart and assembled axially without having to release the two halves from their shafts. An involute ring gear manufactured from elastic polyurethane pre-tensions the two halves positively, separates them galvanically and joins them together without play. Thanks to adherence to gap dimension 's', model KK14S also attains electrical insulation in addition to achieving a long service life. The coupling is particularly suitable for use at high accelerations and for transmitting high torques.

Clamping coupling KK14N

The clamping coupling can be optionally equipped with a fitted spring groove according to DIN 6885 P. 1-JS9.

Clamping coupling according to ATEX 95 - KK14N-ATEX

The couplings have been assessed and confirmed according to EU Directives 94/9/EC (ATEX 95) as category 2G/2D devices, and are thus suitable for use in zone G1, G2, D21 and D22 areas which are at risk from explosion.

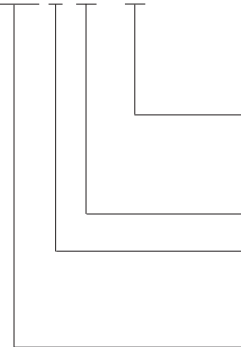
Order number: e.g. KK14N/12-10 - ATEX

Technical data

- Rated torque: 4 Nm
- Max. torque: 8 Nm
- Max. rotational speed: 12,000 rpm
- Static rotary spring stiffness: 60.2 Nm/rad
- Dynamic rotary spring stiffness: 180 Nm/rad
- Radial spring stiffness Cr: 153 N/mm
- Mass moment of inertia J: Per hub: 2.8 x 10⁻⁶ kgm²
- Mass moment of inertia J: Ring gear: 0.457 x 10⁻⁶ kgm²
- Bore fit size: H7
- Max. parallel offset: ≤ 0.2 mm (lateral offset)
- Max. axial displacement: ≤ 1 mm
- Max. angular offset: ≤ 1°
- Operating temperature
 - Permanently: - 50°C + 80°C
 - Temporarily: - 60°C + 120°C
- Ring gear Shore hardness: 80 Shore A
- Material
 - Ring gear: Polyurethane
 - Clamping hub: AlMgSiSnBi (Stanal 32)
- Weight: ca. 50 g
 (with bore diameter d1 / d2 = Ø 6 / Ø 10 mm)
- Options:
 - Fitted spring groove DIN 6885 P. 1-J59
 - ATEX 95

Order number

KK14 S 12 - 12



Bore diameter d1 / d2 ^{H7}

d2*	6,0	8,0
d1*	10,0	12,0

S = With galvanic separation
 N = With groove for fitted spring
 (DIN 6885 P.1-JS9)

Model series KK14

* Bores can be combined

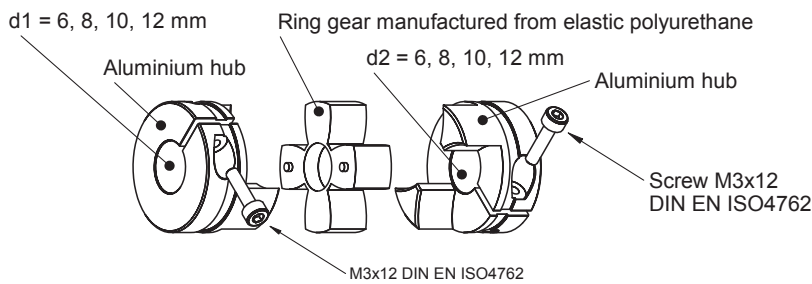
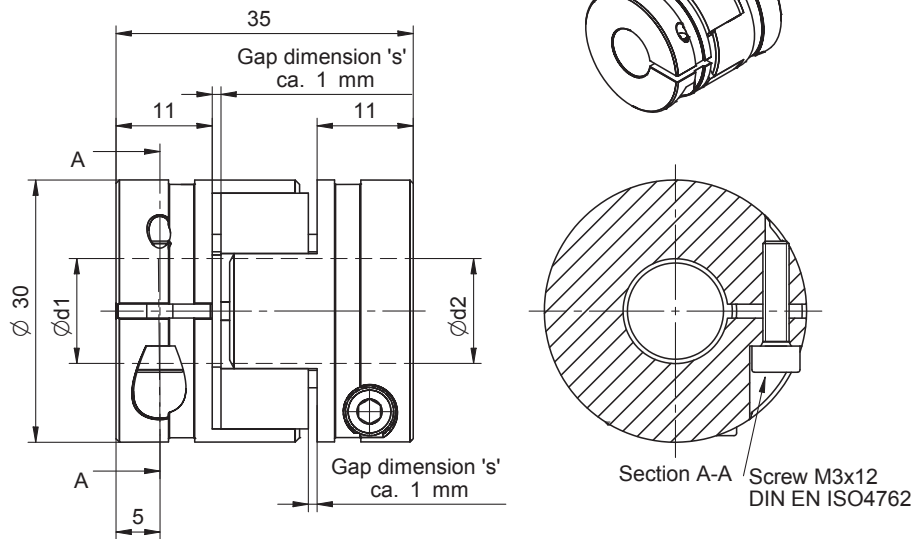
Installation instructions

1. Recommended shaft fit k6 (h6).
2. The values specified for the torque and the axial offset must not exceed the specified value on assembly.
3. Adherence to the offset value and the torque value is required for a long service life in continuous operation. Particular attention in this regard is given to the lateral offset.
4. Additionally securing the threaded screws is not required.

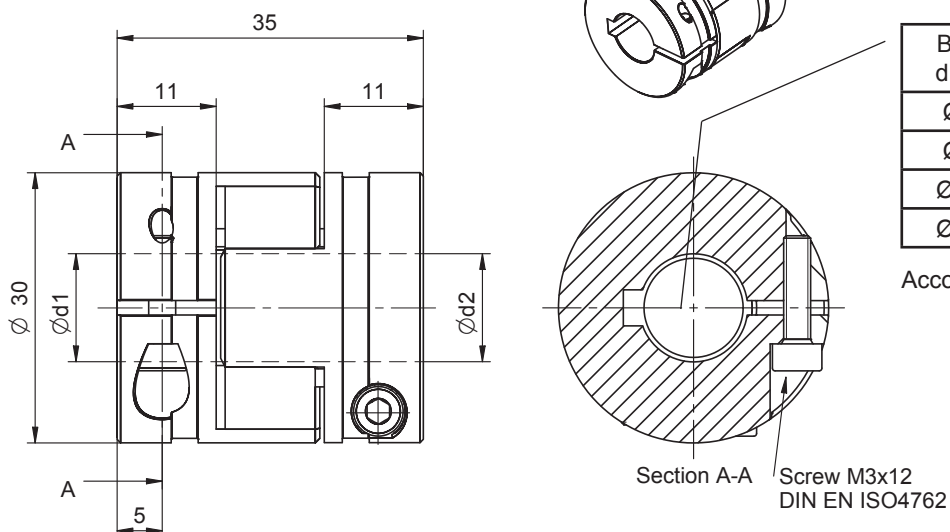
Clamping coupling models KK14

Dimensions in mm

KK14S with galvanic separation



KK14N with groove for fitted spring



Tolerance ranges

Diameter in mm	Tolerance in μm		
	Bore	Shafts	
	H7	k6	h6
$\varnothing 6$	+12/ 0	+9/ +1	0/ -8
$\varnothing 8, 10$	+15 0	+10/ +1	0/ -9
$\varnothing 12$	+18/ 0	+12/ +1	0/ -11